Report of the Regional Working Group

Lynne Carter, Gary Yohe and Fred Lipschultz

Third NCADAC Meeting

August 17, 2011

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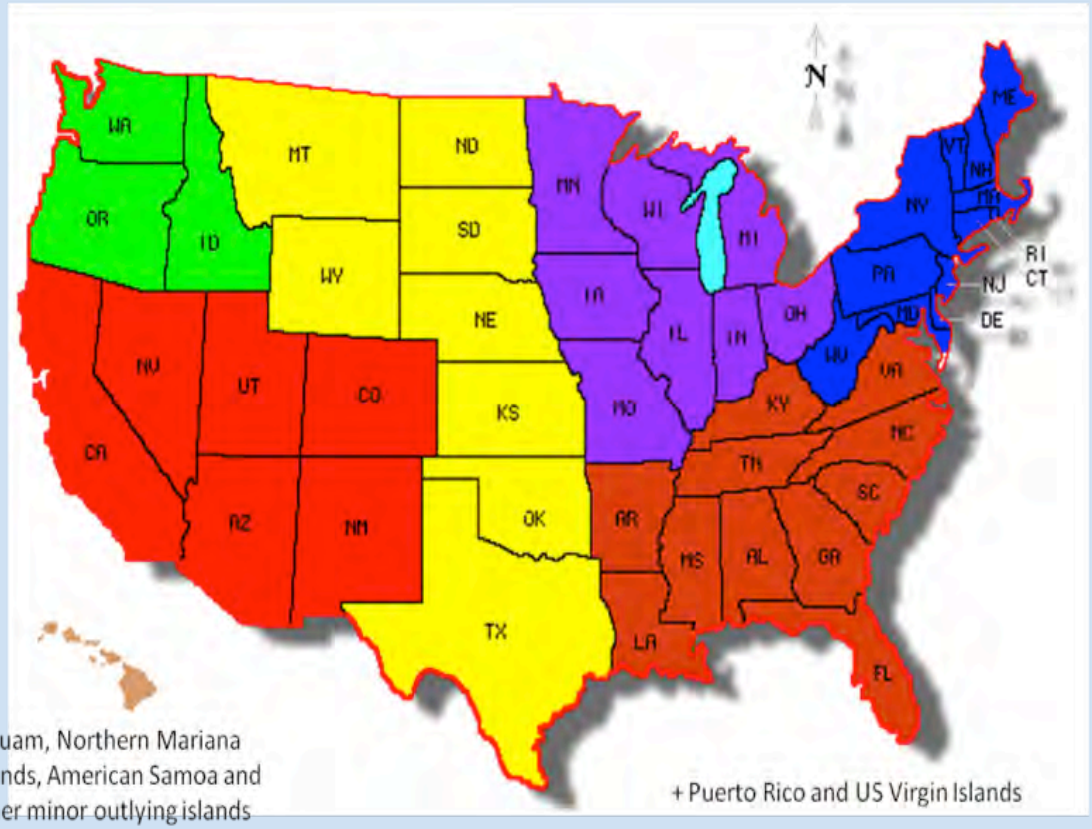
- Northeast
- Southeast and Caribbean
- Midwest
- Great Plains
- Northwest
- Southwest
- Alaska and Arctic
- Hawaii and Pacific Islands



+ Guam, Northern Mariana Islands, American Samoa and other minor outlying islands

+ Puerto Rico and US Virgin Islands

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Issues and Topics for the NCADAC

1) Coordination of NCA efforts with CEQ effort on regional climate services and adaptation (for the input process but critical for the writing process)

2) The evolving regional strategy document – note revisions coming
   a. Minimum requirements and key elements
   b. Solidify the link with the NAC strategy
   c. Risk-based focus in the NAC strategy taken on board in the regional strategy

3) RWG composition and RWG communication schedule
   a. Technical input franchise leadership (xls) for each region + RWG members for each region
   b. Current schedule of regional meetings – NCA and CEQ; others?
   c. Different regional approaches - e.g. a full-blown "IPCC approach" of SW vs. potential NW approach of a post-doc compiling (assessing) what has been done (and what is missing).

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Issues and Topics continued

4) Regional issues to tee-up
    a. Coordination between components:
        i. GL as part of both NE & MW as well as in Coastal x-cut or
        ii. Transport across the Mississippi between MW and GP regions as well as considered in the transportation sector
    b. What is envisioned for the oceans & marine resources – we have a proposal

5) More general issues
    a. Integrating inputs from the RFI process
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Regions	Communications	Meetings	Notes
NCADAC Regional Working Group	Monthly telecons		
Northeast - ME NH VT MA CT RI NY PA NJ MD DE DC	Regular telecons	potentially 3rd week Sept.	Connected to pre-existing New England Regional Partners (Federal agencies)
Southeast + Caribbean - NC SC FL VA WV TN KY GA PR AL LA MS AR	Regular telecons	September 29-30, 2011	
Midwest - MN WI IL IN OH MI MO IA	Regular telecons	July 27, 2011	
Great Plains - WY MT ND SD NE KS OK TX	Regular telecons	August 18, 2011	
Southwest - CA NV NM UT AZ CO	Regular telecons & collaborative webspace	August 1-4, 2011	Employing NCA collaborative webspace. Producing NCA report followed by their own 'IPCC' style report
Northwest - OR WA ID	Regular telecons	September 13-14, 2011	
Alaska and Arctic	Regular telecons	September 12, 2011	Focusing on coastal Arctic Ocean rather than pan-Arctic
Hawaii & Pacific Islands	Regular telecons & collaborative webspace	August 16 & 18, 2011	Has developed PIRCA (Pacific Islands Regional Climate Assessment) collaborative webspace. Splitting region into 3 sub-regions.

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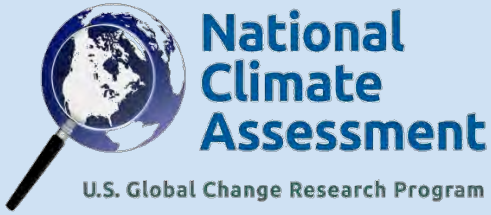
Regions	Lead Agencies	Lead Contact	INCA Contact	NCADAC	NCA Staff	Supporting Agencies
Northeast - ME NH VT MA CT RI NY PA NJ MD DE DC	NOAA - RISA	Cynthia Rosenzweig (RISA/NOAA)	Leidner (NASA)	Yohe	Lipschultz	USDA, NASA(GISS)
Southeast + Caribbean - NC SC FL VA WV TN KY GA PR AL LA MS AR	NOAA - RISA	Keith Ingram, Lynne Carter & Kirsten Dow (RISA/NOAA), David Brown (NOAA RCSD)	Parris (NOAA)	Carter	Lipschultz	DOI-Southeast CSC, USDA, DoD, NASA(MSRC)
Midwest - MN WI IL IN OH MI MO IA	ARS-USDA, NOAA -RISA	Jerry Hatfield (USDA); Don Scavia (RISA/NOAA)	Walsh (USDA)	Pryor	Lipschultz	DoD
Great Plains - WY MT ND SD NE KS OK TX	DOI - CSC, NOAA - RISA	Dennis Ojima (DOI-CSC), Doug Kluck & David Brown (NOAA RCSD), Mark Shafer (RISA/NOAA)	Burkett (DOI)	Posey	Lipschultz	USDA, DoD,
Southwest - CA NV NM UT AZ CO	DOI - CSC, NOAA - RISA	Jonathan Overpeck, Gregg Garfin, (RISA/NOAA)	Parris (NOAA)	Liverman	Jacobs	DOI-Southwest CSC, USDA, DoD, NASA(AMES)
Northwest - OR WA ID	DOI - CSC, NOAA RISA	Phil Mote, DOI CSC and RISA/NOAA	Burkett (DOI)	Mote	Lipschultz	USDA
Alaska and Arctic	NOAA,DOI - CSC	Leslie Holland-Bartels (DOI-USGS) James Partain (NOAA) & Sarah Trainor (RISA/NOAA)	Burkett (DOI), Hall (DoD)	Chapin	Lipschultz	USDA, DoD
Hawaii & Pacific Islands	NOAA, DOI	John Marra (NOAA RCSD), Deeana Spooner (DOI)	Parris (NOAA)	Leong	Lipschultz	USDA, DoD



Biogeographical Cross-cuts	Potential Lead Agencies	Lead Contact	INCA Contact	NCADAC	NCA Staff	Supporting Agencies
Coastal Zone, Development, and Ecosystems Case Studies	NOAA, USGS			Coley, Obeysekera, Moser	Cantral/Lipschultz	
San Francisco Bay Delta	USFWS (DOI), NMFS (NOAA)		Aragon-Long? (DOI), Parris (NOAA)	Moser		
Chesapeake	EPA		Grambsch? (EPA)			
Gulf Coast	NOAA		Waple (NOAA)			
Watersheds Case Studies				Dos Santos	Lipschultz	
Colorado						
Columbia					Kenney	
Great Lakes						
Mississippi Basin?						
Oceans and Marine Resources (includes ocean acidification	NOAA	Roger Griffis (NOAA/NMFS)	Waple (NOAA)	Rosenberg, Armbrust	Lipschultz	

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Key Elements for a Regional Chapter

1. Introduction/Background: Setting the stage
2. Evaluate region's changing climate: past, present, and potential futures

    Geography, economy, climate (historical trends, stresses, etc.)
    Socioeconomic, environmental, and climate future(s)
    Could include:
        Evaluate and respond to NCA scenarios
        Identify uncertainties
        Indicators of climate impacts & vulnerabilities

    (NOTE: Refer to the Regional NCA Scenario information or locate your work in their scenarios particularly with respect to climate experience and scenarios. In either case, anchor your work on regional representations of A1 and B2 scenarios (even with respect to socio-economic anchoring to SRES story lines. Reference Ken Kunkel and his team for the linkage; but be assured that this is not a straightjacket. It is a benchmark to try to create some consistency across regional representations of likelihood in their considerations of risk (likelihood being one of two fundamental determinants of risk – the other is consequence calibrated in whatever metrics make sense)

Key Elements, continued

3. Planning for the 21st Century

   Identify key vulnerabilities (expressed in terms of risk with attribution to the criteria and traceable accounts to statements about likelihood and consequence as well as descriptions of how you arrived at these conclusions)

   Inventory key regional adaptation and mitigation efforts and capacity. What can we do (or are we doing) now (with respect to ameliorating risk either through exposure or sensitivity with traceable accounts to the underlying documentation and your thought processes)? Illuminate differences in the timing and frequency of decisions (responsive iteration as the future unfolds versus, for example, incorporating a wide range of futures into a decision about a long-term infrastructure investment) as well as the basis for anticipated iteration and/or adjustments as things evolve over time (be explicit about what things and suggest monitoring mechanisms for key drivers or key manifestations of risk – e.g., extreme events).

   Define priority topics and information needs. What do we still need to know or have assistance with/for?

Key Elements, continued

4. Regional richness: case studies (sectors of importance, places of importance, etc)

   Impacts, challenges, opportunities, cross cutting issues

   Explain the selection process for selecting case studies in terms of evidence and the degree to which they illustrate key vulnerabilities.

   If possible, select case studies that portray both regional richness and some of the nuances that emerge from your discussions per numbers 2 and 3 (so that they fit the text even as they are offered in stand-alone boxes, for example).

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The Coastal and Marine Chapters

- The two chapters would be divided based on the general concept that…
- Impacts of CC on the ‘wet’ side would be covered in the Marine chapter, and
- Impacts arising from the ‘wet’ side ON the coast would be in the Coastal chapter.

- For example, SLR is coastal since the impacts are there, habitat shifts (coastal & marine) are marine since they happen in the water.

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Possible items for the Coastal Chapter (distinguishing from Regional or Sectoral chapters?)

Physical drivers – SLR, extreme events (hurricanes/storm surge, floods), currents, wave direction,

Vulnerability and Impacts to natural resources –

changes in habitat (wetlands, beaches, SAV)

changes in biota

water quality related to SLR, extreme events, upland flooding, etc., (includes saltwater intrusion)

Vulnerability assessments for SLR, extreme events, coastal erosion

Inventory of coastal infrastructure within the 100-year floodzone+SLR

Societal impacts: economic, insurance response, emergency response, etc…

Adaptation activities –

Inventory of adaptation plans; public adaptation activities; training activities

Agencies -- NOAA, USGS

Partners -- NERRS, Sea Grant, Marine Sanctuaries, Sierra Club, TNC, IOOS, Coastal America

Case Studies: Salient issues for each system, feeding these forward to the chapter

SF Bay Delta; Chesapeake Bay; Gulf Coast; Puget Sound (partners exist for most)

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Possible items for Ocean Chapter

Physical Drivers

- Ocean acidification
- Temperature

Vulnerability and Impacts

- Harmful algal blooms
- Fisheries & Aquaculture (includes impacts to coastal fisheries)
- Habitat shifts (largely from temperature, current regime change etc.)
- Coral Reefs
- Hypoxia (both coastal and oceanic)
- *How much of global issues affecting the US should be considered here too? Transport, national security, Antarctica etc.*

Adaptation Activities

- Marine Protected Areas

Agencies – NOAA

Partners: ??

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Discussion and Input from NCADAC

- Confirm “key elements” for regional inputs and chapters
- Acknowledge progress and suggest additional steps to be incorporated
- Acknowledge and confirm ocean and marine chapters
- Offer counsel on remaining issues:
  - Coordination across overlapping domains
  - Mississippi River basis – hypertext example?
  - Coordination with CEQ activities
  - Incorporation of RFI responses

    - ETC…..

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- THANK YOU FOR YOUR ATTENTION…..
- THE FLOOR IS YOURS!

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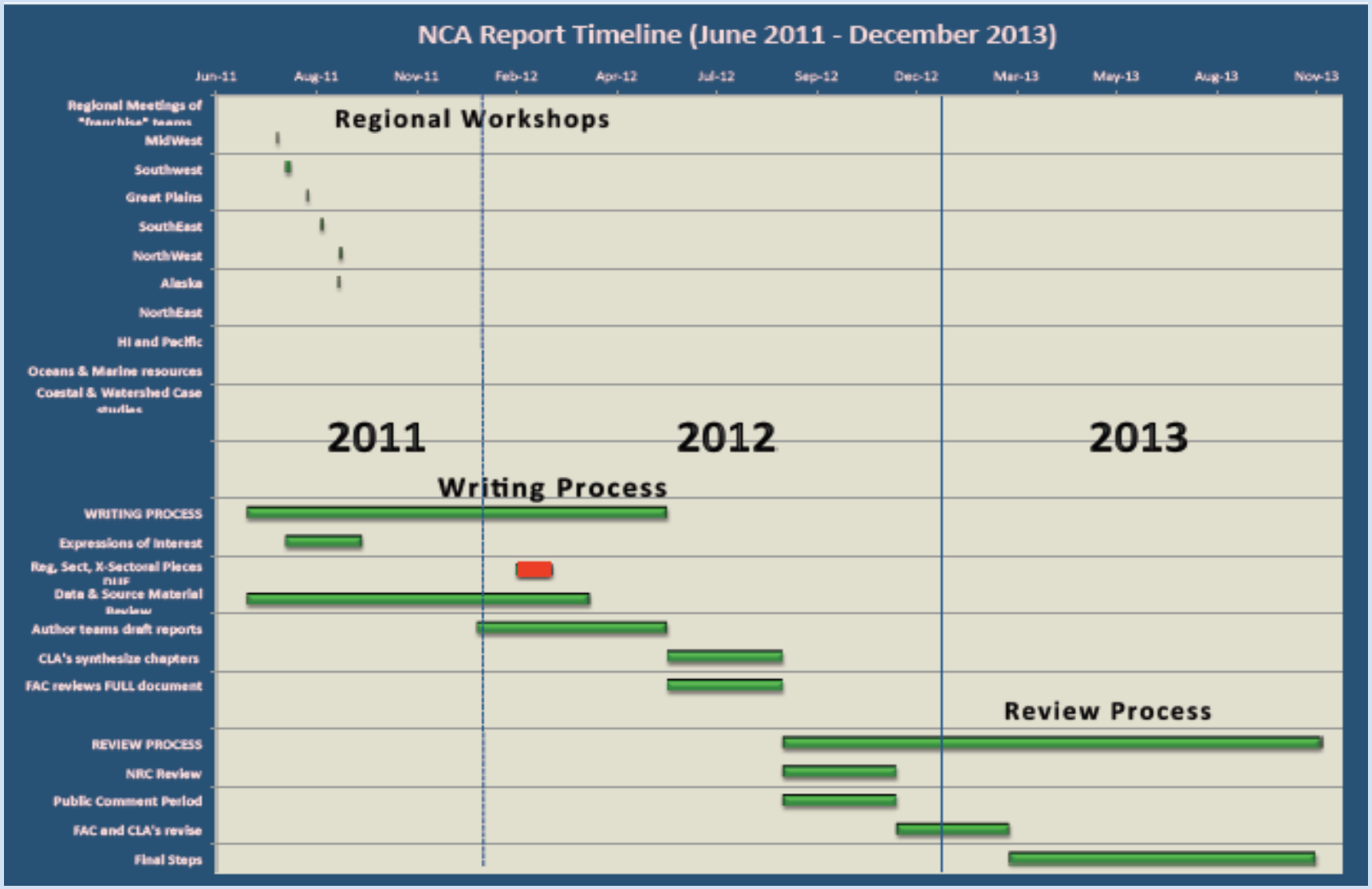

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